

PTO/SB/08A (08-03)

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Substitute Form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 14

Complete if Known

Application Number	10/759,985
Filing Date	January 16, 2004
First Named Inventor	Schinazi et al.
Group Art Unit	1623
Examiner	Crane, Lawrence E.
Attorney Docket Number	18085.105326 EMU 133 CON 5

4742181 1.DOC

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pgs, Clmns, Lns, Where Relevant Passages/Relevant Figs Appear
		Number	Kind Code (if known)			
	AA	3,116,282	A	Hunter	12-31-1963	
	AB	3,553,192	A	Gauri	01-05-1971	
	AC	3,817,982	A	Verheyden et al.	06-18-1974	
	AD	4,000,137	A	Dvonch et al.	12-28-1976	
	AE	4,336,381	A	Nagata et al.	06-22-1982	
	AF	4,788,181	A	Driscoll et al.	11-29-1988	
	AG	4,861,759	A	Hiroaki et al.	09-05-1989	
	AH	4,879,277	A	Mitsuya et al.	11-07-1989	
	AI	4,900,828	A	Belica et al.	11-07-1989	
	AJ	4,916,122	A	Chu et al.	02-13-1999	
	AK	4,963,533	A	de Clercq et al.	04-10-1990	
	AL	4,963,662	A	Matthes et al.	10-16-1990	
	AM	4,968,674	A	Taniyama et al.	10-16-1990	
	AN	5,011,774	A	Farina et al.	11-06-1990	
	AO	5,041,449	A	Belleau et al.	04-30-1991	
	AP	5,047,407	A	Belleau et al.	08-20-1991	
	AQ	5,059,690	A	Zahler et al.	09-10-1991	
	AR	5,071,983	A	Koszalka et al.	10-22-1991	
	AS	5,089,500	A	Daluge	02-18-1992	
	AT	5,151,426	A	Belleau et al.	09-29-1992	
	AU	5,179,104	A	Chu et al.	01-12-1993	
	AV	5,185,437	A	Koszalka et al.	02-09-1993	
	AW	5,204,466	A	Liotta et al.	04-20-1993	
	AX	5,210,085	A	Liotta et al.	05-11-1993	
	AY	5,215,971	A	Datema et al.	06-01-1993	
	AZ	5,233,041	A	Bray et al.	08-03-1993	
	AAA	5,234,913	A	Furman, Jr. et al.	08-10-1993	
	AAB	5,241,069	A	Vince et al.	08-31-1993	
	AAC	5,246,924	A	Fox et al.	09-21-1993	
	AAD	5,248,776	A	Chu et al.	09-28-1993	
	AAE	5,270,315	A	Belleau et al.	12-14-1993	

Examiner
Signature

L. E. Crane

Date
Considered

01/02/2008

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			Examiner Name	Crane, Lawrence E.	
Sheet	2	of	14	Attorney Docket Number	18085.105326 EMU 133 CON 5

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		Number	Kind Code (if known)			
	BA	5,276,151	A	Liotta et al.	01-04-1994	
	BB	5,329,008	A	Partridge et al.	07-12-1994	
	BC	5,409,906	A	Datema et al.	04-25-1995	
	BD	5,432,165	A	Adair et al.	07-11-1995	
	BE	5,444,063	A	Schinazi et al.	08-22-1995	
	BF	5,446,029	A	Eriksson et al.	08-29-1995	
	BG	5,466,806	A	Belleau et al.	11-14-1995	
	BH	5,496,935	A	Matthes et al.	03-05-1996	
	BI	5,521,161	A	Malley et al.	05-28-1996	
	BJ	5,561,120	A	Lin et al.	10-01-1996	
	BK	5,567,688	A	Chu et al.	10-22-1996	
	BL	5,604,209	A	Ubasawa et al.	02-18-1997	
	BM	5,627,160	A	Lin et al.	05-06-1997	
	BN	5,631,239	A	Lin et al.	05-20-1997	
	BO	5,703,058	A	Schinazi et al.	12-30-1997	
	BP	5,756,478	A	Cheng et al.	05-26-1998	
	BQ	5,869,461	A	Cheng et al.	02-09-1999	
	BR	5,905,070	A	Schinazi et al.	05-18-1999	
	BS	6,232,300	B1	Schinazi et al.	05-15-2001	
	BT	6,348,587	B1	Schinazi et al.	02-19-2002	
	BU	6,391,859	B1	Schinazi et al.	05-21-2002	
	BV	2002/0198173	A1	Schinazi et al.	12-26-2002	
	BW	6,680,303	B2	Schinazi et al.	01-20-2004	

FOREIGN PATENT DOCUMENTS								
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MC	BX	DE	1 620 047		Merck	03-17-1970		
3	BY	EP	0 206 497	B1	Wellcome Foundation LTD	07-20-1994		
	BZ	EP	0 217 580	A2	Wellcome Foundation LTD	04-08-1987		
	BAA	EP	0 285 884	A2	Bristol-Myers Company	10-12-1988		
MC	BAB	EP	0 337 713	B1	BioChem Pharma	10-18-1995		
	BAC	EP	0 352 248	A1	Medivir Aktieboiag	01-24-1990		

Examiner Signature	L. E. Crane	Date Considered	01/02/2008
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<i>He</i>	CA	EP	0 375 329	A2	Wellcome Foundation LTD	06-27-1990		
<i>He</i>	CB	EP	0 382 526	A2	IAF BioChem Int'l	08-16-1990		
<i>He</i>	CC	EP	0 409 227	A2	Akad Wiss DDR	01-23-1991		
<i>He</i>	CD	EP	0 433 898	A2	Abbott Laboratories	06-26-1991		
<i>He</i>	CE	EP	0 494 119	A1	IAF BioChem Int'l	07-08-1992		
<i>He</i>	CF	EP	0 515 144	A1	BioChem Pharma	11-25-1992		
<i>He</i>	CG	EP	0 515 156	B1	BioChem Pharma	11-25-1992		
<i>He</i>	CH	EP	0 515 157	B1	BioChem Pharma	09-03-1997		
<i>He</i>	CI	EP	0 519 464	B1	Ajinimoto	12-23-1992		
<i>He</i>	CJ	EP	0 526 253	A1	BioChem Pharma	02-03-1993		
<i>He</i>	CK	JP	7-109221		Wellcome Foundation Ltd	04-25-1995		
<i>He</i>	CL	NL	8,901,258		Stichting Rega	12-17-1990		y
<i>He</i>	CM	WO	88/07532	A1	Holmes, et al.	10-06-1988		
<i>He</i>	CN	WO	88/08001	A1	Aktiebolaget Astra	10-20-1988		
<i>He</i>	CO	WO	90/12023	A1	Walker, et al.	10-18-1990		
<i>He</i>	CP	WO	91/06554	A1	Nycomed	05-16-1991		
<i>He</i>	CQ	WO	91/09124	A1	Biotech AU PTY. LTD	06-27-1991		
<i>He</i>	CR	WO	91/11186	A1	Emory University	08-08-1991		
<i>He</i>	CS	WO	91/16333	A1	Southern Res Inst	10-31-1991		
<i>He</i>	CT	WO	91/17159	A1	IAF Biochem Int'l, Inc.	11-14-1991		
<i>He</i>	CU	WO	91/19727	A1	Sloan Kettering Inst	12-26-1991		
<i>He</i>	CV	WO	92/06102	A1	Medivir AB	04-16-1992		
<i>He</i>	CW	WO	92/08727	A1	Consiglio Naz. Delle Ricerche	05-29-1992		
<i>He</i>	CX	WO	92/10496	A1	UGA Research Found.	06-25-1992		
<i>He</i>	CY	WO	92/10497	A1	UGA Res. Found.; Emory U.	06-25-1992		
<i>He</i>	CZ	WO	92/14729	A1	Emory University	09-03-1992		
<i>He</i>	CAA	WO	92/14743	A2	Emory University	09-03-1992		
<i>He</i>	CAB	WO	92/15308	A1	Wellcome Foundation LTD	09-17-1992		
<i>He</i>	CAC	WO	92/18517	A1	Yale University, et al.	10-29-1992		
<i>He</i>	CAD	WO	92/21676	A1	Glaxo Group Limited	12-10-1992		
<i>He</i>	CAE	WO	93/23021	A2	Wellcome Foundation LTD	11-25-1993		
<i>He</i>	CAF	WO	94/09793	A1	Emory University	05-11-1994		
<i>He</i>	CAG	WO	94/14456	A1	Biochem Pharma	07-07-1994		
Examiner Signature	L. E. Crane				Date Considered	01/02/2008		

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		Office ³	Number	Kind Code ² (if known)				
<i>PC</i>	DA	WO	94/14802	A1	Biochem Pharma	07-07-1994		
	DB	WO	94/14831	A1	University of Alberta	07-07-1994		
	DC	WO	94/27590	A1	Gov't of United States	12-08-1994		
<i>PC</i>	DD	WO	94/27616	A1	Yale University	12-08-1994		
	DE	WO	95/07086	A1	Emory University	03-16-1995		
<i>PC</i>	DF	WO	95/07287	A1	Ctr. Nat. de la Recherche Sci.	03-16-1995		
	DG	WO	95/18137	A1	Genta Incorporated	07-06-1995		
	DH	WO	95/20595	A1	UGA Research Found.	08-03-1995		
	DI	WO	95/21183	A1	Acid (Canada) Inc.	08-10-1995		
	DJ	WO	96/22778	A1	Emory University	08-01-1996		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
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<i>PC</i>	DK	Database WPI, Week 8748, Derwent Publications Ltd., London, GB; AN 87-338135 for JP 62-242624 A to Asahi Glass 10-23-1987; [98-338135], Abstract.		
<i>PC</i>	DL	EPO Search Report for SN. 96 902772, July 26, 1999.		
	DM	ABOBO <i>et al.</i> , "Pharmacokinetics of 2', 3'-Dideoxy-5-fluoro-3'-thiacytidine in Rats," <i>J. Pharmaceutical Sciences</i> , 83(1), 96-99 (January 1994).		
	DN	Van AERSCHOT <i>et al.</i> , "3'-Fluoro-2',c'-dideoxy-5-chlorouridine: Most Selective Anti-HIV-1 Agent among a Series of New 2'- and 3'-Fluorinated 2',3'-Fluorinated 2',3'-Dideoxynucleoside Analogs," <i>J. Med. Chem.</i> , 32(8)1743-1749 (1989).		
	DO	Van AERSCHOT <i>et al.</i> , "Synthesis and Anti-HIV Evaluation of 2',3'-Dideoxy-5-chloropyrimidine Analogues: Reduced Toxicity of 5-Chlorinated 2', 3'-Dideoxynucleosides", <i>J. Med. Chem.</i> , 33(6), 1833-1839 (1990).		
	DP	AGROFOGLIO <i>et al.</i> , "Synthesis of Carbocyclic Nucleosides," <i>Tetrahedron</i> , 50(36):10611-10670 (1994).		
	DQ	AJMERA, S., <i>et al.</i> , "Synthesis and Biological Activity of 5-Fluoro-2',3'-Dideoxy-3'-fluorouridine and its 5'-phosphate," <i>J. Med. Chem.</i> , 27(1): 11-14 (1984).		
	DR	ASSELIN <i>et al.</i> , "Synthesis and physiochemical properties of oligonucleotides built with either .alpha.-L or .beta.-L nucleotides units and covalently linked to an acridine derivative," <i>Nucl. Acids Res.</i> , 19(15):4067-4074 (1991).		
<i>PC</i>	DS	BALZARINI <i>et al.</i> , "2',3'-Didehydro-2',3'-dideoxy-5-chlorocytidine Is A Selective Anti-Retrovirus Agent," <i>Biochem. Biophys. Res. Comm.</i> , 164(3), 1190-1197 (November 15, 1989).		

Examiner Signature	L. E. Crane <i>L. E. Crane</i>	Date Considered	01/02/2008
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	EA	BALZARINI <i>et al.</i> , "5-Chloro-substituted Derivatives of 2', 3'-Dideohydro-2', 3'-dideoxyuridine, 3-Fluoro-2', 3'-dideoxyuridine and 3'-Azido-2', 3'-dideoxyuridine as Anti-HIV Agents," <i>Biochem. Pharmacology</i> , 38(6), 869-874 (1989).	
	EB	BALZARINI, J., <i>et al.</i> , "Potent and Selective Anti-HTLV-III/LAV Activity of 2',3'-Dideoxycytidine, the 2',3'-Unsaturated Derivative of 2',3'-Dideoxycytidine," <i>Biochemical and Biophysical Research Communications</i> , 140(2):735-742 (1986).	
	EC	BEACH, J. W., <i>et al.</i> , "Synthesis of Enantiomerically Pure (2'R,5'S)-(1)-[2-hydroxymethyl]-oxatiolan-5-yl] Cytosine as a Potent Antiviral Agent Against Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV)," <i>J. Org. Chem.</i> , 57:2217-2219 (1992).	
	ED	BELLEAU, B., <i>et al.</i> , "Design and Activity of a Novel Class of Nucleoside Analogs Effective Against HIV-1," International Conference on AIDS, Montreal, Quebec, Canada, Jun. 4-9, 1989, p. 516.	
	EE	BELLEAU, B., <i>et al.</i> , Chem. Abst. 118(17):169533s (1993).	
	EF	BELLEAU, B., <i>et al.</i> , "A Novel Class of 1,3-Oxathiolane Nucleoside Analogs Having Potent Anti-HIV Activity," <i>Bioorgan. Med. Chem. Lett.</i> , 3(8):1723-1728 (1993)	
	EG	BIRON <i>et al.</i> , "Anti-HIV Activity of the Combination of Didanosine and Hydroxyurea in HIV-1 Infected Individuals," <i>J. AIDS and Human Retrovirology</i> , 10(1):36-40 (August 1995).	
	EH	BORTHWICK, <i>et al.</i> , "Synthesis and Enzymatic Resolution of Carbocyclic 2'-Ara-Fluoro-Guanosine: A Potent New Anti-Herpetic Agent," <i>J. Chem. Soc. Commun.</i> , 10:656-658 (1988).	
	EI	BOUFFARD, D.Y., <i>et al.</i> , "Kinetic Studies on 2'2'-Difluorodeoxycytidine(Gemcitabine) with Purified Human Deoxycytidine Kinase and Cytidine Deaminase," <i>Biochem. Pharmacol.</i> , 45(9):1857-1861 (1993).	
	EJ	CARTER <i>et al.</i> , "Activities of (-)-Carbovir and 3'-Azido-3'-Deoxythymidine Against Human Immunodeficiency Virus In Vitro," <i>Antimicrobial Agents and Chemotherapy</i> , 34(6):1297-1300 (1990).	
	EK	CHANG, C.-N., <i>et al.</i> , "Biochemical Pharmacology of (+) and (-)-2',3'-Dideoxy-3'-Thiacytidine as Anti-Hepatitis B Virus Agents," <i>J. Biol. Chem.</i> , 267(3):22414-22420 (1992).	
	EL	CHANG, Chien-Neng, <i>et al.</i> , "Deoxycytidine Deaminase-resistant Stereoisomer Is the Active Form of (+/-)-2',3'-Dideoxy-3'-thiacytidine in the Inhibition of Hepatitis B Virus Replication," <i>J. Biological Chemistry</i> , 267(20):13938-13942 (1992).	
	EM	CHANG, Chungming, <i>et al.</i> , "Production of Hepatitis B Virus In Vitro by Transient Expression of Cloned HBV DNA in a Hepatoma Cell Line," <i>EMBO Journal</i> , 6(3):675-680 (1987).	
	EN	CHEN, Chin-Ho, <i>et al.</i> , "Delayed Cytotoxicity and Selective Loss of Mitochondrial DNA in Cells Treated with the Anti-Human Immunodeficiency Virus Compound 2',3'-Dideoxycytidine," <i>J. Biological Chemistry</i> , 264(20):11934-11937 (1989).	

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Submitted for form 1449/PTO				Complete if Known	
				Application Number	10/759,985
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	January 16, 2004
				First Named Inventor	Schinazi <i>et al.</i>
				Group Art Unit	1623
				Examiner Name	Crane, Lawrence E.
				Attorney Docket Number	18085.105326 EMU 133 CON 5
Sheet	6	of	14		

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JEC	FA	CHOI <i>et al.</i> , "In Situ Complexation Directs the Stereochemistry of N-Glycosylation in the Synthesis of Oxathiolanyl and Dioxalanyl Nucleoside Analogues," <i>J. Am. Chem. Soc.</i> , 113:9377-9379 (1991).	
	FB	CHOI <i>et al.</i> , "Synthesis, Anti-Human Immunodeficiency Virus, and Anti-Hepatitis B Virus Activity of Pyrimidine Oxathiolane Nucleosides," <i>Biorganic & Medicinal Chemistry Letters</i> , 3(4):693-696 (1993).	
	FC	CHOTTINER, E.G., "Cloning and Expression of Human Deocycytidine Kinase cDNA," <i>Proc. Natl. Acad. Sci. USA</i> , 88:1531-1535 (1991).	
	FD	CHU, C.K., <i>et al.</i> , "An Efficient Total Synthesis of 3'-Azido-3'-Deoxythymidine (AZT) and 3'-Azido-2',3'-Dideoxyuridine (AZDDU, CS-87) from D-Mannitol," <i>Tetrahedron Lett.</i> , 29(42):5349-5352 (1988).	
	FE	CHU <i>et al.</i> , "Comparative Activity of 2',3'-Saturated and Unsaturated Pyrimidine and Purine Nucleosides Against Human Immunodeficiency Virus Type 1 in Peripheral Blood Mononuclear Cells," <i>Biochem. Pharm.</i> , 37(19):3543-3548 (1988).	
	FF	CHU <i>et al.</i> , "Structure-Activity Relationships of Pyrimidine Nucleosides as Antiviral Agents for Human Immunodeficiency Virus Type 1 in Peripheral Blood Mononuclear Cells," <i>J. Med. Chem.</i> , 32:612-617 (1989).	
	FG	CHU <i>et al.</i> , "Use of 2'-Fluoro-5-Methyl-beta-L-Arabinofuranosyluracil as a Novel Antiviral Agent for Hepatitis B Virus and Epstein-Barr Virus," <i>Antimicrob. Agents Chemother.</i> , 39(4):979-981 (1995).	
	FH	COATES <i>et al.</i> , "The Separated Enantiomers of 2'-Deoxy-3'-thiacytidine(BCH-189) both Inhibit Human Immunodeficiency Virus Replication in vitro," <i>Antimicrob. Agents Chemother.</i> , 36(1):202-205 (January 1992).	
	FI	COE, P.L. <i>et al.</i> , "The synthesis of Difluoro and Trifluoro Analogs of Pyrimidine Deoxyribonucleosides: A Novel Approach Using Elemental Fluorine," <i>J. Fluorine Chem.</i> , 69(1):19-24 (1994).	
	FJ	CONDREAY <i>et al.</i> , "Evaluation of the Potent Anti-Hepatitis B Virus Agent (-) cis-5-Fluoro-1[2-(Hydroxymethyl)-1,3-Oxathiolan-5-yl] Cytosine in a Novel In Vivo Model," <i>Antimicrobial Agents and Chemotherapy</i> , 38(3):616-619 (1994).	
JEC	FL	CRETTON, E., <i>et al.</i> , "Catabolism of 3'-Azido-3'-Deoxythymidine in Hepatocytes and Liver Microsomes, with Evidence of Formation of 3'-Amino-3'-Deoxythymidine, a Highly Toxic Catabolite for Human Bone Marrow Cells," <i>Molecular Pharmacology</i> , 39:258-266 (1991).	
	FM	CRETTON, E., <i>et al.</i> , "Pharmacokinetics of 3'-Azido-3'-Deoxythymidine and its Catabolites and Interactions with Probenecid in Rhesus Monkeys," <i>Antimicrobial Agents and Chemotherapy</i> , 35(5):801-807 (1991).	
ERR.			
JEC	FN	DAVISSON <i>et al.</i> , "Synthesis of Nucleotide 5'-Diphosphates from 5'-O-Tosyl Nucleosides," <i>J. Org. Chem.</i> , 52:1794-1801 (1987).	
	FO	Di BISCEGLIE, A.M., <i>et al.</i> , "Hepatocellular Carcinoma," NIH Conference, <i>Annals of Internal Medicine</i> , 108:390-401 (1988) (Summary of meeting held December 3, 1986).	

Examiner Signature	L. E. Crane <i>[Signature]</i>	Date Considered	01/02/2008
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PC	GA	DOONG, Shin-Lian, <i>et al.</i> , "Inhibition of the Replication of Hepatitis B Virus in vitro by 2',3'-Dideoxy-3'-Thiacytidine and Related Analogues," <i>Proc. Natl. Acad. Sci. USA</i> , 88:8495-8499 (October 1991).	
---	GC	EMORY University, "Letter in re Opposition to EP 0 337 713," August 22, 1997, only p.1 supplied.	
PC	GD	FEORINO <i>et al.</i> , "Prevention of Activation of HIV-1 by Antiviral Agents in OM-10.1 Cells," <i>Antiviral Agents & Chemotherapy</i> , 4(1):55-63 (1993).	
	GE	FEORINO <i>et al.</i> , <i>Chem. Abst.</i> 118(19):182829n (May 10, 1993).	
	GF	FRICK <i>et al.</i> , "Pharmacokinetics, Oral Bioavailability, and Metabolic Disposition in Rats of (-) cis-5-Fluoro-1-[2-(Hydroxymethyl)-1, 3-Oxathiolan-5-yl] Cytosine, a Nucleoside Analog Active Against Human Immunodeficiency Virus and Hepatitis B Virus" <i>Antimicrobial Agents and Chemotherapy</i> , 37(11), 2285-2292 (November 1993).	
	GG	FRICK <i>et al.</i> , "Pharmacokinetics, Oral Bioavailability, and Metabolic Disposition in Mice and Cynomolgus Monkeys of (2'R,5'S)-cis-5-Fluoro-1-[2-(Hydroxymethyl)-1, 3-Oxathiolan-5-yl] Cytosine, an Agent Active Against Human Immunodeficiency Virus and Hepatitis B Virus," <i>Antimicrobial Agents and Chemotherapy</i> , 38(12) 2722-2729 (December 1994).	
	GH	FUJIMORI <i>et al.</i> , "A Convenient and Stereoselective of 2'-Deoxy-Beta-L-Ribonucleosides," <i>Nucleosides & Nucleotides</i> , 11(2-4):341-349 (1992).	
	GI	FURMAN <i>et al.</i> , "The Anti-Hepatitis B Virus Activities, Cytotoxicities, and Anabolic Profiles of the (-) and (+) Enantiomers of cis-5 Fluoro-1-[2-(Hydroxymethyl)-1,3-Oxthiolane-5-yl]Cytosine," <i>Antimicrobial Agents and Chemotherapy</i> , 36(12):2686-2692 (December 1992).	
	GJ	GANEM, D., <i>et al.</i> , "The Molecular Biology of the Hepatitis B Viruses," <i>Ann. Rev. Biochem.</i> , 56:651-693 (1987).	
	GK	GENU-DELLAC <i>et al.</i> , "3'-substituted thymine Alpha-L-nucleoside derivatives as potential antiviral agents: synthesis and biological evaluation," <i>Antiviral Chem. & Chemother.</i> , 2(2):83-92 (1991).	
	GL	GENU-DELLAC <i>et al.</i> , "Synthesis of New 2'-Deoxy-3'-Substituted-Alpha-L-Threo-Pentofuranonucleosides of Thymine as Potential Antiviral Agents," <i>Tetrahedron Letters</i> , 32(1):79-82 (January 1991).	
	GM	GOSSELIN, "Enantiomeric 2',3'-Deoxycytidine Derivatives are Potent Human Immunodeficiency Virus Inhibitors in Cell Cultures," <i>C. R. Acad. Sci. Paris Sci. Vie.</i> , 317:85-89 (January 1994).	
	GN	GU <i>et al.</i> , "Identification of a Mutation at Codon 65 in the IKKK Motif of Reverse Transcriptase That Encodes Human Immunodeficiency Virus Resistant to 2', 3'-Dideoxycytidine and 2', 3'-Dideoxy-3'-Thiacytidine," <i>Antimicrobial Agents and Chemotherapy</i> , 38(2), 275-281 (February 1994).	
	GO	GUMINA <i>et al.</i> , "Synthesis and Potent Anti-HIV Activity of L-3'-Fluoro-2'-c3'-Unsaturated Cytidine," <i>Organic Letters</i> , 3(26):4177-4180 (2001); ACS Web publ. date: Dec. 4, 2001.	
PC	GP	HERDEWIJN <i>et al.</i> , "Resolution of Aristeromycin Enantiomers," <i>J. Med. Chem.</i> , 28:1385-1386 (1985).	

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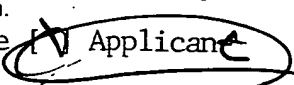
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Examiner Name	Crane, Lawrence E.					
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<i>AC</i>	HA	HOARD and OTT, "Conversion of Mono- and Oligodeoxyribonucleotides to 5'-Triphosphates," <i>J. Am. Chem. Soc.</i> , 87(8):1785-1788 (April 20, 1965).	
	HB	HOLY, "[61] 2'-Deoxy-L-Uridine Total Synthesis of a Uracil 2'-Deoxynucleosides from a Sugar 2-Aminooxazoline Through a 2,2'-Anhydronucleoside Intermediate," <i>Nucl. Acid. Chem.</i> , 347-353 (Townsend and Tipson, Editors, John Wiley & Sons, New York, Chichester, Brisbane, Toronto).	
	HC	HOLY, "Nucleic Acid Components and Their Analogues. CLIII. Preparation of 2'-Deoxy-L-Ribonucleosides of the Pyrimidine Series," <i>Coll. Czechoslov. Chem. Commun.</i> , 37:4072-4087 (1972).	
	HD	HOONG <i>et al.</i> , "Enzyme-Mediated Enantioselective Preparation of Pure Enantiomers of the Antiviral Agent 2', 3'-Dideoxy-5-fluoro-3'-thiacytidine (FTC) and Related Compounds," <i>J. Organic Chem.</i> , 57(21), 5563-5565 (October 9, 1992).	
	HE	HOONG <i>et al.</i> , <i>Chem. Abst.</i> 117(19):192246p (1992).	
	HF	HORWITZ, J.P., <i>et al.</i> , "Nucleosides. VIII. Synthesis of 2',3'-Unsaturated Pyrimidine Nucleosides from Oxetane Derivatives," <i>Tetrahedron Letters</i> , 1964(38):2725-2727 (1964).	
	HG	HRONOWSKI, L.J.J., <i>et al.</i> , "Synthesis of Cyclopentane Analogs of 5-Fluorouracil Nucleosides," <i>Canadian J. Chem.</i> , 70(4):1162-1169 (1992).	
	HH	HUTCHINSON, "New approaches to the synthesis of antiviral nucleosides," <i>Trends in Biotech.</i> , 8(12):348-353 (December 1990).	
	HI	IMAI <i>et al.</i> , "Studies on Phosphorylation IV. Selective Phosphorylation of the Primary Hydroxyl Group in Nucleosides," <i>J. Org. Chem.</i> , 34(6):1547-1550 (June 1969).	
	HJ	IZUTA, Shunje, <i>et al.</i> , "Inhibitory Effects of Various 3'-Dexoyribonucleotides on DNA Polymerase.alpha.2-primase from Developing Cherry Salmon (<i>Oncorhynchus masou</i>) Testes," <i>Nucleic Acids Symp. Ser.</i> 16, 1985, 241-244, XP002086626.	
	HK	JANSEN <i>et al.</i> , "High Capacity In Vitro Assessment of Anti-Hepatitis B Virus Compound Selectivity by a Virion-Specific Polymerase Chain Reaction Assay," <i>Antimicrobial Agents and Chemotherapy</i> , 37(3), 441-447 (March 1993).	
	HL	JANSEN <i>et al.</i> , <i>Chem. Abst.</i> 118(19):182688r (1993).	
	HM	JEONG <i>et al.</i> , "Structure-Activity Relationships of .beta.-D-(2S, 5R)- and .alpha.-D-(2S,5R)-1,3-Oxathiolanyl Nucleosides as Potential Anti-HIV Agents," <i>J. Med. Chem.</i> , 36(18), 2627-2638 (1993).	
	HN	JEONG, L., <i>et al.</i> , "Asymmetric Synthesis and Biological Evaluation of .beta.-L-(2R,5S)- and .alpha.-L-(2R,5R)-1,3-Oxathiolane-Pyrimidine and -Purine Nucleosides and Potential Anti-HIV Agents," <i>J. Med. Chem.</i> , 36(2):181-195 (January 22, 1993).	
	HO	KASSIANIDES, C., <i>et al.</i> , "Inhibition of Duck Hepatitis B Virus Replication by 2',3'-Dideoxycytidine," <i>Gastroenterology</i> , 97(5):1275-1280 (July-December 1989).	
<i>AC</i>	HP	KHWAJA, T.A., <i>et al.</i> , "Fluorinated Pyrimidines," <i>J. Med. Chem.</i> , 10(6):1066-1070 (November 1967).	

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<i>McC</i>	IB	KIM <i>et al.</i> , "1,3-Dioxolanylpurine Nucleosides (2R,4R) and (2R,4S) with Selective Anti-HIV-1 Activity in Human Lymphocytes," <i>J. Med. Chem.</i> , 36(1):30-37 (1993).			
<i>McC</i>	IC	KIM, <i>et al.</i> , "L-beta-(2S,4S)-L-alpha-(2S,4R)-Dioxolanyl Nucleosides as Potential Anti-HIV Agents: Asymmetric Synthesis and Structure-Activity Relationships," <i>J. Med. Chem.</i> , 36(5):519-528 (March 5, 1993).			
<i>McC</i>	ID	KIM <i>et al.</i> , "Potent Anti-HIV and Anti-HBV Activities of (-)-L-beta-Dioxolane-C and (+)-L-beta-Dioxolane-T and Their Asymmetric Syntheses," <i>Tetrahedron Lett.</i> , 33(46):6899-6902 (1992).			
<i>McC</i>	IE	KOSHIDA <i>et al.</i> , "Structure-Activity Relationships of Fluorinated Nucleoside Analogs and Their Synergistic Effect in Combination with Phosphonoformate Against Human Immunodeficiency Virus Type I," <i>Antimicrobial Agents and Chemotherapy</i> , 33(12):2083-2088 (December, 1989).			
**	IF	KRENITSKY <i>et al.</i>, "An Enzymic Synthesis of Purine D-Arabinonucleosides," <i>Carbohydrate Research</i>, 97:139-146 (1981).			
<i>McC</i>	IG	KRENITSKY, T.A., <i>et al.</i> , "3'-Amino-2',3'-Dideoxyribunucleosides of Some Pyrimidines: Synthesis and Biological Activities," <i>J. Med. Chem.</i> , 26:891-895 (1983).			
<i>McC</i>	IH	KUKHANOVA <i>et al.</i> , "L-and D-Enantiomers of 2',3'-Dideoxycytidine 5'-Triphosphate Analogs as Substrates for Human DNA Polymerases," <i>J. Biol. Chem.</i> , 270(39):23056-23059 (September 29, 1995).			
<i>McC</i>	II	LEE, Bonita, <i>et al.</i> , "In Vitro and In Vivo Comparison of the Abilities of Purine and Pyrimidine 2',3'-Dideoxynucleosides To Inhibit Duck Hepadnavirus," <i>Antimicrobial Agents and Chemotherapy</i> , 33(3):336-339 (March 1989).			
**	IJ	LIN <i>et al.</i>, "Antiviral Activity of 2',3'-Dideoxy-beta-L-5-fluorocytidine(.beta.-L-FddC) and 2',3'-Dideoxy-beta-L-cytidine (.beta.-L-ddC) Against Hepatitis B Virus and Human Immunodeficiency Virus Type 1 in Vitro," <i>Biochemical Pharmacology</i>, 47(2):171-174 (1994).			
<i>McC</i>	IK	LIN <i>et al.</i> , "Potent and Selective In Vitro Activity of 3'-Deoxythymidine-2-Ene-(3'-Deoxy-2',3'-Didehydrothymidine) Against Human Immunodeficiency Virus," <i>Biochem. Pharm.</i> , 36(17):2713-2718 (1987).			
<i>McC</i>	IL	LORI <i>et al.</i> , "Hydroxyurea as an Inhibitor of Human Immunodeficiency Virus-Type 1 Replication," <i>Science</i> , 266, 801-805 (4 Nov. 1994).			
<i>McC</i>	IM	MAHMOUDIAN <i>et al.</i> , "Enzymatic Production of Optically Pure (2'R-cis)-2'-deoxy-3'-thiacytidine (3TC, Lamivudine): A Potent Anti-HIV Agent," <i>Enzyme Microb. Technol.</i> , 15:749-755 (September 1993), published by the Glaxo Group Research.			

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[Handwritten signature]	JA	MANSOUR <i>et al.</i> , "Anti-Human Immunodeficiency Virus and Anti-Hepatitis-B Virus Activities and Toxicities of the Enantiomers of 2'-Deoxy-3'-oxa-4'-thiocytidine and Their 5-Fluoro Analogues in Vitro," <i>J. Med. Chem.</i> , 38(1):1-4 (January 6, 1995).	
	JB	MANSOUR <i>et al.</i> , "Structure-Activity Relationships Among a New Class of Antiviral Heterosubstituted 2', 3'-Dideoxynucleoside Analogues," <i>Nucleosides & Nucleotides</i> , 14(3-5):627-635 (1995).	
	JC	MANSOUR <i>et al.</i> , <i>Chem. Abst.</i> 118(21):213450p (May 24, 1993).	
	JD	MANSURI <i>et al.</i> , "Preparation of the Geometric Isomers of DDC, DDA, D4C, and D4T as Potential Anti-HIV Agents," <i>Bioorgan. and Med. Chem. Lett.</i> , 1(1):65-68 (1991).	
	JE	MATHEZ <i>et al.</i> , "Infectious Amplification of Wild-Type Human Immunodeficiency Virus from Patients' Lymphocytes and Modulation by Reverse Transcriptase Inhibitors In Vitro," <i>Antimicrobial Agents and Chemotherapy</i> , 37(10), 2206-2111 (October 1993).	
	JF	MATTHES, E., <i>et al.</i> , "Potent Inhibition of Hepatitis B Virus Production In Vitro by Modified Pyrimidine Nucleosides," <i>Antimicrobial Agents and Chemotherapy</i> , 34(10):1986-1990 (October 1990).	
	JG	MILLER, R.H., <i>et al.</i> , "Common Evolutionary Origin of Hepatitis B Virus and Retroviruses," <i>Proc. Natl. Acad. Sci. USA</i> , 83:2531-2535 (April 1986).	
	JH	MITSUYA, H., <i>et al.</i> , "3'-Azido-3'-Deoxythymidine (BW A 509U): An Antiviral Agent that Inhibits the Infectivity and Cytopathic Effect of Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus In Vitro," <i>Proc. Natl. Acad. Sci., USA</i> , 82:7096-7100 (October 1985).	
	JI	MITSUYA, H., <i>et al.</i> , "Molecular Targets for AIDS Therapy," <i>Science</i> , 249:1533-1544 (September 28, 1990).	
	JJ	MITSUYA, H., <i>et al.</i> , "Rapid in Vitro Systems for Assessing Activity of Agents Against HTLV-III/LAV," <i>AIDS: Modern Concepts and Therapeutic Challenges</i> , S. Broder, Ed. Marcel-Dekker, New York (1987), pp. 303-333 (Chapter 18).	
JK	NASSAL, M., <i>et al.</i> , "Hepatitis B Virus Replication," <i>Trends in Microbiology</i> , 1(6):221-228 (September 1993).		
JL	NORBECK, D., <i>et al.</i> , "A New 2',3'-Dideoxynucleoside Prototype with In Vitro Activity Against HIV," <i>Tetrahedron Lett.</i> , 30(46):6263-6266 (1989).		
JM	OKABE, M., <i>et al.</i> , "Synthesis of the Dideoxynucleosides, ddC and CNT from Glutamic Acid, Ribonolactone, and Pyrimidine Bases," <i>J. Org. Chem.</i> , 53(20):4780-4786 (1988).		
JN	ONETTO <i>et al.</i> , "In Vitro Biochemical Tests to Evaluate the Response to Therapy of Acute Leukemia with Cytosine Arabinoside or 5-AZA-2'-Deoxycytidine," <i>Semin. Oncol.</i> , 14(12)Suppl. 1:231-237 (March 1987).		
JO	PAFF <i>et al.</i> , "Intracellular Metabolism of (-)- and (+)-cis-5-Fluoro-1-[2-(Hydroxymethyl)-1,3-Oxathiolan-5-yl] Cytosine in HepG2 Derivative 2.2.15 (Subclone P5A) Cells," <i>Antimicrobial Agents and Chemotherapy</i> , 38(6) 1230-1238 (1994).		

Examiner Signature	L. E. Crane 	Date Considered	01/02/2008
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				First Named Inventor	Schinazi <i>et al.</i>
				Group Art Unit	1623
				Examiner Name	Crane, Lawrence E.
Sheet	11	of	14	Attorney Docket Number	18085.105326 EMU 133 CON 5

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JEC	KA	PAI <i>et al.</i> , "Inhibition of Hepatitis B Virus by a Novel L-Nucleoside, 2'-Fluoro-5-Methyl-.beta.-L-Arabinofuranosyl Uracil," <i>Antimicrob. Agents and Chemother.</i> , 40(2):380-386 (February 1996).	
	KB	PAINTER <i>et al.</i> , <i>Chem. Abst.</i> 117(23):226298z (December 7, 1992).	
	KC	PAINTER <i>et al.</i> , <i>Chem. Abst.</i> 118(6):45750r (1992).	
	KD	PARKER <i>et al.</i> , "Mechanism of Inhibition of Human Immunodeficiency Virus Type 1 Reverse Transcriptase and Human DNA Polymerase .alpha., .beta.0 and .gamma. by the 5'-Triphosphates of Carbovir. 3'-Azdo-3'-deoxythymidine. 2',3'-Dideoxyguanosine, and 3'-Deoxythymidine," <i>J. Biological Chem.</i> , 208(3), 1754-1762 (January 25, 1991).	
	KE	PHILPOTT <i>et al.</i> , "Evaluation of 9-(2-phophonylmethoxyethyl) adenine therapy for feline immunodeficiency virus using a quantitative polymerase chain reaction," <i>Vet. Immunol. and Immunopathol.</i> , 35:155-166 (1992).	
	KF	PIRKLE and POCHANSKY, "Chiral Stationary Phases for the Direct LC Separation of Enantiomers," <i>Advances in Chromatography</i> , Giddings, J.C., Grushka, E., Brown, P.R., eds.: Marcel Dekker: New York, 1987; vol. 27, Chap. 3, pp. 73-127.	
	KG	RICHMAN, D. D., "The Toxicity of Azidothymidine (AZT) in the Treatment of Patients with AIDS and AIDS-Related Complex," <i>N. Eng. J. Med.</i> , 317(4):192-197 (July 23, 1987).	
	KH	ROBINS <i>et al.</i> , "Purine Nucleosides. XXIX. The Synthesis of 2'-Deoxy-L-adenosine and 2'-Deoxy-L-guanosine and Their Alpha Anomers," <i>J. Org. Chem.</i> , 87:636-639 (March 1970).	
	KI	Van ROEY <i>et al.</i> , "Absolute Configuration of the Antiviral Agent (-)-cis-5-Fluoro-1-[2-(Hydroxymethyl)-1,3-Oxathiolan-5-yl] Cytosine," <i>Antiviral Agents and Chemotherapy</i> , 4(6), 369-375 (1993).	
	KJ	SATSUMABAYASHI, S. <i>et al.</i> , "The Synthesis of 1,3-Oxathiolane-5-one Derivatives," <i>Bull. Chem. Soc. Japan</i> , 45:913-915 (March 1972).	
	KK	SCHINAZI, R.F., <i>et al.</i> , "Antiviral Drug Resistance Mutations in Human Immunodeficiency Virus Type 1 Reverse Transcriptase Occur in Specific RNA Structural Regions," <i>Antimicrobial Agents and Chemotherapy</i> , 38(2):268-274 (February 1994).	
JEC	KL	SCHINAZI, R.F., <i>et al.</i> , "Characterization of Human Immunodeficiency Viruses Resistant to Oxathiolane-Cytosine Nucleosides," <i>Antimicrobial Agents and Chemotherapy</i> , 37(4):875-881 (April 1993).	
	KM	SCHINAZI, R.F., <i>et al.</i> , "Pure Nucleoside Enantiomers of .beta.-2',3'-Dideoxycytidine Analogs Are Selective Inhibitors of Hepatitis B Virus In Vitro," <i>Antimicrobial Agents and Chemotherapy</i> , 38(9):2172-2174 (Septmeber 1994).	

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<i>[Signature]</i>	LA	SCHINAZI, R.F., <i>et al.</i> , "Activities of the Four Optical Isomers of 2',3'-Dideoxy-3'-Thiacytidine (BCH-189) against Human Immunodeficiency Virus Type 1 in Human Lymphocytes," <i>Antimicrobial Agents and Chemotherapy</i> , 36(3):672-676 (March 1992).	
<i>[Signature]</i>	LB	SCHINAZI, R.F., <i>et al.</i> , "Insights into HIV Chemotherapy," <i>AIDS Research and Human Retroviruses</i> 8(6):963-990 (1992).	
<i>[Signature]</i>	LC	SCHINAZI, R.F., <i>et al.</i> , "Pharmacokinetics and Metabolism of Racemic 2',3'-Dideoxy-5-Fluoro-3'-Thiacytidine in Rhesus Monkeys," <i>Antimicrobial Agents and Chemotherapy</i> , 36(11):2432-2438 (November 1992).	
<i>[Signature]</i>	LD	SCHINAZI, R.F., <i>et al.</i> , "Selective Inhibition of Human Immunodeficiency Viruses by Racemates and Enantiomers of cis-5-Fluoro-1-[2-(Hydroxymethyl)-1,3-Oxathiolan-5-yl]Cytosine," <i>Antimicrobial Agents and Chemotherapy</i> , 36(11):2423-2431 (November 1992).	
**	LE	SCHINAZI, R.F., <i>et al.</i> , "Substrate Specificity of Escherichia Coli Thymidine Phosphorylase for Pyrimidine Nucleoside with an Anti-Human Immunodeficiency Virus Activity," <i>Biochemical Pharmacology</i> , 44(2):199-204 (1992).	
<i>[Signature]</i>	LF	SECRIST <i>et al.</i> , "Resolution of Racemic Carbocyclic Analogues of Purine Nucleosides Through the Action of Adenosine Deaminase Antiviral Activity of the Carbocyclic 2'-Deoxyguanosine Enantiomers," <i>J. Med. Chem.</i> , 30:746-749 (1987).	
<i>[Signature]</i>	LG	SELLS, M.A., <i>et al.</i> , "Production of Hepatitis B Virus Particles in Hep G2 Cells Transfected with Cloned Hepatitis B Virus DNA," <i>Proc. Natl. Acad. Sci. USA</i> , 84:1005-1009 (February 1987).	
<i>[Signature]</i>	LH	SHEWACH <i>et al.</i> , "Affinity of the Antiviral Enantiomers of Oxathiolane Cytosine Nucleosides for Human 2'-Deoxycytidine Kinase," <i>Biochem. Pharmacology</i> , 45(7), 1540-1543 (1993).	
<i>[Signature]</i>	LI	SHIGETA, Shiro <i>et al.</i> , "Comparative Inhibitory Effects of Nucleoside Analogs on Different Clinical Isolates of Human Cytomegalovirus In Vitro," <i>J. Infect. Dis.</i> , 163(2):270-275 (February 1991), XP002086627.	
<i>[Signature]</i>	LJ	SIDDIQUI, M.A., <i>et al.</i> , "Chemistry and Anti-HIV Properties of 2'-Fluoro-2'-c3'-dideoxyarabinofuranosylpyrimidines," <i>J. Med. Chem.</i> , 35(12):2195-2201 (1992).	
<i>[Signature]</i>	LK	SOUDEYNS, H., <i>et al.</i> , "Anti-Human Immunodeficiency Virus Type 1 Activity and In Vitro Toxicity of 2'-Deoxy-3'-Thiacytidine (BCH-189), a Noval Heterocyclic Nucleoside Analog," <i>Antimicrobial Agents and Chemotherapy</i> , 35(7):1386-1390 (July 1991).	
<i>[Signature]</i>	LL	SPADARI <i>et al.</i> , "L-Thymidine Is Phosphorylated by Herpes Simplex Virus Type 1 Thymidine Kinase and Inhibits Viral Growth," <i>J. Med. Chem.</i> , 35(22):4214-4220 (1992).	
<i>[Signature]</i>	LM	STERZYCKI, R.Z., <i>et al.</i> , "Synthesis and anti-HIV activity of several 2'-fluoro-containing pyrimidine nucleosides," <i>J. Med. Chem.</i> , 33(8):2150-2157 (1990).	

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MA	MA	STORER, R., <i>et al.</i> , "The Resolution and Absolute Stereochemistry of the Enantiomers of cis-1-[2-(Hydromethyl)-1,3-Oxathiolan-5-yl]cytosine (BCH189): Equipotent Anti-HIV Agents," <i>Nucleosides & Nucleotides</i> , 12(2):225-236 (1993).	
MB	MB	SU <i>et al.</i> , "Nucleosides. 136. Synthesis and Antiviral Effects of Several 1-(2-Deoxy-2-Fluoro-B-D-Arabinofuranosyl)-5-Allyluracils. Some Structure-Activity Relationships," <i>J. Med. Chem.</i> , 29(1):151-154 (1986).	
MC	MC	SUREAU, C., <i>et al.</i> , "Production of Hepatitis B Virus by a Differential Human Hepatoma Cell Line after Transfection with Cloned Circular HBV DNA," <i>Cell</i> , 47:37-47 (1986).	
MD	MD	TANN <i>et al.</i> , "Fluorocarbohydrates in Synthesis. An Efficient Synthesis of 1-(2-Deoxy-2-Fluoro-B-D-Arabinofuranosyl)-5-iodouracil (B-FIAU) and 1-(2-Deoxy-2-Fluoro-B-D-Arabinofuranosyl)thymine (B-FMAU)," <i>J. Org. Chem.</i> , 50:3644-3647 (September 20, 1985).	
ME	ME	TISDALE <i>et al.</i> , "Rapid In Vitro Selection of Human Immunodeficiency Virus Type 1 Resistant to 3'-Thiacytidine Inhibitors Due to a Mutation in the YMDD Region of Reverse Transcriptase," <i>Proc. Natl. Acad. Sci. USA</i> , 90:5653-5656 (June 1993).	
MF	MF	TSURIMOTO, Toshiki, <i>et al.</i> , "Stable Expression and Replication of Hepatitis B Virus Genome in an Integrated State in a Human Hepatoma Cell Line Transfected with the Cloned Viral DNA," <i>Proc. Natl. Acad. Sci. USA</i> , 84:444-448 (January 1987).	
MG	MG	Van DRAANEN <i>et al.</i> , "Influence of Stereochemistry on Antiviral Activities and Resistance Profiles of Dideoxycytidine Nucleosides," <i>Antimicrobial Agents and Chemotherapy</i> , 38(4):868-871 (April 1994).	
MH	MH	VINCE <i>et al.</i> , "Resolution of Racemic Carbovir and Selective Inhibition of Human Immunodeficiency Virus by the (-)Enantiomer," <i>Biochem. and Biophys. Res. Comm.</i> , 168(3):912-915 (May 16, 1990).	
MI	MI	VOLK, Wesley, A., editor, "Hepatitis," <i>Essentials of Medical Microbiology</i> , J.B. Lippincott Company, (Philadelphia/Toronto), 2nd Ed., pp. 609-618 (1982).	
MJ	MJ	VORBRUGGEN <i>et al.</i> , "Nucleoside Synthesis with Trimethylsilyl Triflate and Perchlorate as Catalysts," <i>Chem. Ber.</i> , 114:1234-1255 (1981).	
MK	MK	WILSON <i>et al.</i> , "The 5'-Triphosphates of the (1) and (+) Enantiomers of cis-5-Fluoro-1-[2-(Hydroxymethyl)-1,3-Oxathiolane-5-yl]Cytosine Equally Inhibit Human Immunodeficiency Virus Type 1 Reverse Transcriptase," <i>Antimicrob. Agents and Chemother.</i> , 37(8):1720-1722 (August 1993).	
ML	ML	WILSON, L.J., <i>et al.</i> , "A General Method for Controlling Glycosylation Stereochemistry in the Synthesis of 2'-Deoxyribose Nucleosides," <i>Tetrahedron Lett.</i> , 31(13):1815-1818 (1990).	
MM	MM	WILSON, L.J., <i>et al.</i> , "The Synthesis and Anti-HIV Activity of Pyrimidine Dioxolanyl Nucleosides," <i>Bioorganic & Medicinal Chemistry Letters</i> , 3(2):169-174 (1993).	
MN	MN	WORLD HEALTH ORGANIZATION, "Progress in the Control of Viral Hepatitis: Memorandum from a WHO Meeting," <i>Bulletin of the World Health Organization</i> , 66(4):443-455 (1988).	

Examiner Signature	L. E. Crane	Date Considered	01/02/2008
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<i>Pre</i>	NA	YOKOTA <i>et al.</i> , "Comparative Activities of Several Nucleoside Analogs Against Duck Hepatitis B Virus In Vitro," <i>Antimicrobial Agents and Chemotherapy</i> , 34(7):1326-1330 (July 1990).	
<i>Pre</i>	NB	ZHU, Zhou, <i>et al.</i> , "Cellular Metabolism of 3'-Azido-2',3'-Dideoxyuridine with Formation of 5'-O-Diphosphohexase Derivatives by Previously Unrecognized Metabolic Pathways of 2'-Deoxyuridine Analogs," <i>Molecular Pharmacology</i> , 38::929-938 (1990).	

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